



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/987,775	12/09/1997	ACHIM GREFENSTEIN	47587/48070	6702
26474	7590	12/15/2005	EXAMINER	
NOVAK DRUCE DELUCA & QUIGG, LLP			KRUER, KEVIN R	
1300 EYE STREET NW			ART UNIT	PAPER NUMBER
SUITE 400 EAST				
WASHINGTON, DC 20005			1773	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	08/987,775	GREFENSTEIN ET AL.
	Examiner	Art Unit
	Kevin R. Kruer	1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 July 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 24, 26, 30, 31, 34, 41 and 43 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 24, 26, 20, 31, 34, 41, and 43 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/26/2004 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 24, 31, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (US 5,747,568) in view of WO96/09928 (aka Sallmetall). Fischer teaches a molding material comprising 30-80wt% of an elastomeric grafting base and 20-70wt% of a shell grafted onto the grafting base (abstract). The grafting base comprises 90-99.9% of at least one alkyl acrylate and 0.1-10wt% of a polyfunctional crosslinking monomer. The shell comprises 0-100% styrene or substituted styrenes, and 0-100% of an acrylonitrile or methyl methacrylate. The above-described particles are dispersed in a hard matrix comprising 60-90wt% styrene or substituted styrene and 10-40% acrylonitrile (col 1, lines 48-col2, line 16). The composition may further contain up to 30t% of additives such as fibers (Col 4, lines 26-

34). This composition exhibit good weather resistance, aging resistance, and high impact strength (col 4, lines 46-53), and are usable as signs (col 4, line 48).

Fischer does not teach that the molding material may be overlaid with a PMMA transparent layer and a transparent protective film. However, Sallmetall teaches a light transmitting cover foil intended for adhesion to an information-carrying surface (page 1, lines 1-5). The first layer of the cover foil comprises a deformable plastic (abstract). The examiner interprets the taught deformable plastic layer to read on the claimed transparent protective film of claim 41 because it will inherently provide the film with some layer of protection. The deformable plastic layer may be textured or patterned if desired (page 1, lines 30+). The cover foil further comprises a dimensionally stable carrier layer comprising, for instance, PMMA (abstract). The examiner notes that the taught dimensionally stable carrier layer reads on Applicant's claimed "transparent top layer of PMMA." A thermally activated hot melt layer comprising EVA, EEA, EBA, EMA, GBA or other low melting thermoplastics may be utilized to adhere the deformable plastic to the carrier sheet (abstract). The layers may be mutually connected via coextrusion (page 2, lines 14-16). It would have been obvious to one of ordinary skill in the art to utilize the cover film taught in Sallmetall on the sign taught in Fischer in order to protect the sign and provide the sign with the desired texturing and patterning.

3. Claims 24, 31, 32, 34, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (US 5,747,568) in view of Ellison US 5,985,079). Fischer teaches a molding material comprising 30-80wt% of an elastomeric grafting base and 20-70wt% of a shell grafted onto the grafting base (abstract). The grafting

base comprises 90-99.9% of at least one alkyl acrylate and 0.1-10wt% of a polyfunctional crosslinking monomer. The shell comprises 0-100% styrene or substituted styrenes, and 0-100% of an acrylonitrile or methyl methacrylate. The above-described particles are dispersed in a hard matrix comprising 60-90wt% styrene or substituted styrene and 10-40% acrylonitrile (col 1, lines 48-col2, line 16). The composition may further contain up to 30t% of additives such as fibers (Col 4, lines 26-34). This composition exhibit good weather resistance, aging resistance, and high impact strength (col 4, lines 46-53), and are usable as automobile parts (col 4, line 48).

Fischer does not teach the application of transparent surface coatings to the taught composition. However, Ellison teaches a flexible composite surfacing film for providing a substrate with desired surface characteristics. The film comprises a flexible transparent outer polymer clear coat layer and a pigmented base coat layer is adhered to said outer clear coat layer and is visible there through (abstract). The transparent outer polymer clear coat layer may comprise outer and inner layers of differing properties. For example, both layers may comprise a blend of fluorinated polymer and an acrylic resin. However, the outer layer may be rich in the fluorinated polymer to enhance weatherability, and the inner layer may be rich in acrylic resin to improve bonding to the pigmented layer (col 7, lines 15-37). The acrylic resin may be polymethyl methacrylate homopolymers (col 6, lines 24-42). Both polymers may be extruded from the same extrusion die (col 7, line 40). The pigmented polymer may also be extruded (col 8, line 35). The surfacing film may be applied to polymeric supporting substrates in accordance with known laminating or bonding techniques. Particularly suitable shaped

articles of the invention are exterior automobile parts (col 11, line 36). Thus, it would have been obvious to one of ordinary skill in the art to apply the surfacing film taught in Ellison to the composition taught in Fischer in order to supply the composition with the desired surface characteristics.

4. Claims 24, 31, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenau et al. (US 5,821,302) in view of Ellison (US 5,985,079). Rosenau teaches a thermoplastic molding composition comprising (a) 50-100wt% of a styrene compound, and (b) 0.1-70wt% of a graft polymer. The styrene compound may comprise 0-40wt% acrylonitrile. The graft polymer comprises 30-90wt% of a core, and 10-70wt% of a graft shell. The core comprises 50-99.99wt% of C1-10 alkyl acrylate, and 0.01-5wt% of a polyfunctional crosslinking monomer. The shell comprises 50-100wt% styrene and 0-40wt% acrylonitrile (col 1, lines 4-65). The graft polymer has an average particle diameter of less than 700nm. The composition may further comprise up to 70wt% of a particulate polymer. The composition is useful in extrusions, injection moldings, calendaring, and rolling (col 10, lines 58-64). The composition is especially useful in exterior applications, such as automobile construction (col 10, lines 65+).

Rosenau does not teach the claimed top coat or protective coat may be applied to the taught composition. However, Ellison teaches a flexible composite surfacing film for providing a substrate with desired surface characteristics. The film comprises a flexible transparent outer polymer clear coat layer and a pigmented base coat layer is adhered to said outer clear coat layer and is visible there through (abstract). The transparent outer polymer clear coat layer may comprise outer and inner layers of

differing properties. For example, both layers may comprise a blend of fluorinated polymer and an acrylic resin. However, the outer layer may be rich in the fluorinated polymer to enhance weatherability, and the inner layer may be rich in acrylic resin to improve bonding to the pigmented layer (col 7, lines 15-37). The acrylic resin may be polymethyl methacrylate homopolymers (col 6, lines 24-42). Both polymers may be extruded from the same extrusion die (col 7, line 40). The pigmented polymer may also be extruded (col 8, line 35). The surfacing film may be applied to polymeric supporting substrates in accordance with known laminating or bonding techniques. Particularly suitable shaped articles of the invention are exterior automobile parts (col 11, line 36). Thus, it would have been obvious to one of ordinary skill in the art to apply the surfacing film taught in Ellison to the composition taught in Rosenau in order to supply the composition with the desired surface characteristics.

5. Claims 24, 31, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenau et al. (US 5,821,302) in view of Trabert et al. (US 5,318,737). Rosenau teaches a thermoplastic molding composition comprising (a) 50-100wt% of a styrene compound, and (b) 0.1-70wt% of a graft polymer. The styrene compound may comprise 0-40wt% acrylonitrile. The graft polymer comprises 30-90wt% of a core, and 10-70wt% of a graft shell. The core comprises 50-99.99wt% of C1-10 alkyl acrylate, and 0.01-5wt% of a polyfunctional crosslinking monomer. The shell comprises 50-100wt% styrene and 0-40wt% acrylonitrile (col 1, lines 4-65). The graft polymer has an average particle diameter of less than 700nm. The composition may further comprise up to 70wt% of a particulate polymer. The composition is useful in

extrusions, injection moldings, calendaring, and rolling (col 10, lines 58-64), and may be utilized to make automotive parts.

Rosenau does not teach that a transparent PMMA coating should be applied over the taught composition. However, Trabert teaches a capstock composition comprising an acrylic polymer and an acrylic based impact-modifying agent (abstract). The acrylic resin may comprise polymerized methyl methacrylate (col 6, line 16). The composition has particularly good flexural modulus and impact strength (col 5, line 27), scratch resistance, thermal resistance, and chemical resistance. Such resin compositions can be extruded onto the desired substrate (col 5, lines 29+) or coextruded with the substrate (col 5, lines 48+). The capstocks are especially useful with structural plastics (col 9, lines 1+). It would have been obvious to one of ordinary skill in the art to coextrude the capstock taught in Trabert with the composition taught in Rosenau in order to improve its chemical resistance, and impact strength.

6. Claims 24, 31, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenau et al. (US 5,821,302) in view of EP006421 (aka Endoh). Rosenau teaches a thermoplastic molding composition comprising (a) 50-100wt% of a styrene compound, and (b) 0.1-70wt% of a graft polymer. The styrene compound may comprise 0-40wt% acrylonitrile. The graft polymer comprises 30-90wt% of a core, and 10-70wt% of a graft shell. The core comprises 50-99.99wt% of C1-10 alkyl acrylate, and 0.01-5wt% of a polyfunctional crosslinking monomer. The shell comprises 50-100wt% styrene and 0-40wt% acrylonitrile (col 1, lines 4-65). The graft polymer has an average particle diameter of less than 700nm. The composition may further comprise

up to 70wt% of a particulate polymer. The composition is useful in extrusions, injection moldings, calendaring, and rolling (col 10, lines 58-64).

Rosenau does not teach that a PMMA transparent layer or a protective topcoat may be applied to the taught composition. However, Endoh teaches an extrusion laminate comprising a polyvinylidene fluoride layer, and an adhesive layer comprising a methyl methacrylate polymer (abstract). The methyl methacrylate polymer may comprise PMMA (page 9, lines 14+). The polyvinylidene fluoride layer provides the laminate with excellent weather resistance and chemical resistance. Thus, it would have been obvious to one of ordinary skill in the art to extrude the composition taught in Rosenau with the polyvinylidene fluoride and PMMA layers taught in Endoh in order to improve the composition's weather and chemical resistance.

7. Claims 24, 31, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (US 5,747,568) in view of EP0060421 (aka Endoh). Fischer teaches a molding material comprising 30-80wt% of an elastomeric grafting base and 20-70wt% of a shell grafted onto the grafting base (abstract). The grafting base comprises 90-99.9% of at least one alkyl acrylate and 0.1-10wt% of a polyfunctional crosslinking monomer. The shell comprises 0-100% styrene or substituted styrenes, and 0-100% of an acrylonitrile or methyl methacrylate. The above-described particles are dispersed in a hard matrix comprising 60-90wt% styrene or substituted styrene and 10-40% acrylonitrile (col 1, lines 48-col2, line 16). The composition may further contain up to 30t% of additives such as fibers (Col 4, lines 26-

34). This composition exhibit good weather resistance, aging resistance, and high impact strength (col 4, lines 46-53), and are usable as signs (col 4, line 48).

Fischer does not teach that a PMMA transparent layer or a protective topcoat may be applied to the taught composition. However, Endoh teaches an extrusion laminate comprising a polyvinylidene fluoride layer, and an adhesive layer comprising a methyl methacrylate polymer (abstract). The methyl methacrylate polymer may comprise PMMA (page 9, lines 14+). The polyvinylidene fluoride layer provides the laminate with excellent weather resistance and chemical resistance. Thus, it would have been obvious to one of ordinary skill in the art to extrude the composition taught in Fischer with the polyvinylidene fluoride and PMMA layers taught in Endoh in order to improve the composition's weather and chemical resistance.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over (a) Fischer et al. (US 5,747,568) in view of WO96/09928 (aka Sallmetall), (b) Fischer et al. (US 5,747,568) in view of Ellison US 5,985,079), (c) Rosenau et al. (US 5,821,302) in view of Ellison (US 5,985,079), (d) Rosenau et al. (US 5,821,302) in view of Trabert et al. (US 5,318,737), (e) Rosenau et al. (US 5,821,302) in view of EP0060421 (aka Endoh), or (f) Fischer et al. (US 5,747,568) in view of EP0060421 (aka Endoh), as applied above, and further in view of Tsai et al. (US 5,858,550). Fischer in view of Sallmetall, Fischer in view of Ellison, Rosenau in view of Trabert, Rosenau in view of Endoh, Fischer in view of Endoh, and Rosenau in view of Ellison are relied upon as above. However, none of the references teach that the ratio of MFI values of the individual components of the laminated sheet is not more than 3:1. However, Tsai

teaches that the constituents used to form a coextruded sheet should have melt properties that are substantially similar to one another (col 7, lines 51+). Thus, it would have been obvious to one of ordinary skill in the art to utilize resins that have MFI values substantially similar to one another so that the films can be effectively coextruded.

9. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over (a) Fischer et al. (US 5,747,568) in view of WO96/09928 (aka Sallmetall), (b) Fischer et al. (US 5,747,568) in view of Ellison US 5,985,079), (c) Rosenau et al. (US 5,821,302) in view of Ellison (US 5,985,079), (d) Rosenau et al. (US 5,821,302) in view of Trabert et al. (US 5,318,737), (e) Rosenau et al. (US 5,821,302) in view of EP0060421 (aka Endoh), or (f) Fischer et al. (US 5,747,568) in view of EP0060421 (aka Endoh), as applied above. Fischer in view of Sallmetall, Fischer in view of Ellison, Rosenau in view of Trabert, Rosenau in view of Endoh, Fischer in view of Endoh, and Rosenau in view of Ellison are relied upon as above. None of the references teaches the desired thickness of the laminate. However, Rosenau and Fischer each teach rigid compositions with enhanced impact resistance. Furthermore, Ellison, Trabert, Sallmetall, and Endoh each teach the application of protective layers to such substrates. Thus, it would have been obvious to one of ordinary skill in the art to vary the thickness of the laminate so that the laminate has the desired rigidity, impact resistance, and weather resistance for the intended end use. Furthermore, it would have been obvious to one of ordinary skill in the art to vary the thickness of the substrate composition in order to obtain the desired rigidity and impact resistance in the final product.

10. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (US 5,747,568) in view of Zabrocki et al (US 5,306,548) or McDonagh (US 4,169,180). Fischer teaches a molding material comprising 30-80wt% of an elastomeric grafting base and 20-70wt% of a shell grafted onto the grafting base (abstract). The grafting base comprises 90-99.9% of at least one alkyl acrylate and 0.1-10wt% of a polyfunctional crosslinking monomer. The shell comprises 0-100% styrene or substituted styrenes, and 0-100% of an acrylonitrile or methyl methacrylate. The above-described particles are dispersed in a hard matrix comprising 60-90wt% styrene or substituted styrene and 10-40% acrylonitrile (col 1, lines 48-col2, line 16). The composition may further contain up to 30t% of additives such as fibers (Col 4, lines 26-34). This composition exhibit good weather resistance, aging resistance, and high impact strength (col 4, lines 46-53), and are usable as signs (col 4, line 48).

Fischer does not teach that a styrene-acrylonitrile copolymer layer may be applied to the taught composition. However, Zabrocki teaches a weatherable film for lamination to an underlying substrate. The film comprises an outer layer of weather resistant polymer comprising styrene/acrylonitrile copolymer or butyl acrylate-reinforced styrene/acrylonitrile copolymer (abstract). The film can be utilized with high impact polystyrene substrates (see example 1). NOTE: the composition taught in Fischer is a HIPS composition. For a definition of a HIPS, Applicant's attention is directed to US 4,749,737 (see col 5, lines 27+). Thus, it would have been obvious to one of ordinary skill in the art to apply the styrene-acrylonitrile weatherable film taught in Zabrocki to the

composition taught in Fischer in order to improve said composition's weather resistance.

Similarly, McDonagh teaches a protective layer comprising methacrylate/crosslinked styrene-acrylonitrile/uncrosslinked styrene-acrylonitrile (abstract). Said composition is applied to base layers that lack superior weather resistance (abstract). Thus, it would have been obvious to one of ordinary skill in the art to apply the protective layer taught in McDonagh to the composition taught in Fischer in order to improve its weather resistance.

11. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenau et al. (US 5,821,302) in view of Zabrocki et al (US 5,306,548) or McDonagh (US 4,169,180). Rosenau teaches a thermoplastic molding composition comprising (a) 50-100wt% of a styrene compound, and (b) 0.1-70wt% of a graft polymer. The styrene compound may comprise 0-40wt% acrylonitrile. The graft polymer comprises 30-90wt% of a core, and 10-70wt% of a graft shell. The core comprises 50-99.99wt% of C1-10 alkyl acrylate, and 0.01-5wt% of a polyfunctional crosslinking monomer. The shell comprises 50-100wt% styrene and 0-40wt% acrylonitrile (col 1, lines 4-65). The graft polymer has an average particle diameter of less than 700nm. The composition may further comprise up to 70wt% of a particulate polymer. The composition is useful in extrusions, injection moldings, calendaring, and rolling (col 10, lines 58-64), and may be utilized to make automotive parts.

Rosenau does not teach that a styrene-acrylonitrile copolymer layer may be applied to the taught composition. However, Zabrocki teaches a weatherable film for

lamination to an underlying substrate. The film comprises an outer layer of weather resistant polymer comprising styrene/acrylonitrile copolymer or butyl acrylate-reinforced styrene/acrylonitrile copolymer (abstract). The film can be utilized with high impact polystyrene substrates (see example 1). NOTE: the composition taught in Rosenau is a HIPS composition. For a definition of a HIPS, Applicant's attention is directed to US 4,749,737 (see col 5, lines 27+). Thus, it would have been obvious to one of ordinary skill in the art to apply the styrene-acrylonitrile weatherable film taught in Zabrocki to the composition taught in Rosenau in order to improve said composition's weather resistance.

Similarly, McDonagh teaches a protective layer comprising methacrylate/crosslinked styrene-acrylonitrile/uncrosslinked styrene-acrylonitrile (abstract). Said composition is applied to base layers that lack superior weather resistance (abstract). Thus, it would have been obvious to one of ordinary skill in the art to apply the protective layer taught in McDonagh to the composition taught in Rosenau in order to improve its weather resistance.

Response to Arguments

Applicant's arguments filed 7/26/2004 have been fully considered but they are not persuasive.

Applicant argues none of the references suggests replacing ABS substrate with ASA substrate. The examiner notes the rejection never relied upon the art to provide said motivation.

Applicant further argues the specification demonstrates exchanging an ABS substrate for an ASA substrate increases the penetration energy, low temperature impact strength, and improves the elongation at break. The results of the specification were fully discussed in the final rejection of January 2003. If applicant wishes for further discussion of said results, Applicant must fully explain the results and how they demonstrate an unexpected benefit over the prior art. “[A]ppellants have the burden of explaining the data in any declaration they proffer as evidence of non-obviousness.” *Ex parte Ishizaka*, 24 USPQ2d 1621, 1624 (Bd. Pat. App. & Inter. 1992).

With regard to the rejection of claim 43 as being obvious over Fischer or Roseau, each in view of Zabrocki or McDonagh, Applicant argues SAN is taught as a suitable weatherable film, but that rubber reinforced styrene/acrylonitrile copolymers like AES and ASA are preferred. Applicant further notes the top layer composition may be blended with, for example, PVC. Said arguments have been fully considered but are not persuasive. A prior art reference may be relied upon for all that it teaches and is not limited to its preferred embodiments.

Applicant further argues there is no indication that the second layer may be an ASA copolymer or a styrene acrylonitrile copolymer. The examiner never took said position. Furthermore, applicant’s arguments are not commensurate in scope with the claims. The claims are not limited to embodiments wherein the second layer is either the interlayer of styrene acrylonitrile or the ASA substrate. The claims merely state that the laminate comprise said layers.

Applicant further argues the particulate graft acrylate rubber containing the graft component A2 as defined in claim 43 is not defined in the evidentiary reference as a HIPS polymer. The examiner respectfully disagrees and maintains the position that the definition of HIPS in US 4,749,737 reads on the composition taught in Fischer or Roseau.

Applicant further argues neither Fischer nor Zabrocki suggests forming the claimed laminate. The examiner notes neither reference was relied upon to anticipate the claimed laminate. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant further argues said reference fail to render obvious the claimed invention. The examiner respectfully disagrees for reasons of record.

With respect to McDonagh, Applicant argues said top layer of the reference comprises an ASA resin which does not read on the claimed styrene-acrylonitrile copolymer. The examiner respectfully disagrees. McDonagh teaches there is "little graft polymerization" between the styrene-acrylonitrile and the acrylate polymers (col 2, lines 45+). Thus, the examiner maintains said reference teaches a coating comprising styrene-acrylonitrile.

Applicant then directs arguments to refute the examiner's position in the final rejection of January 3, 2003. Specifically, the examiner took the position that

Applicant's arguments with regards to the laminate's low temperature impact resistance (Table 2), elongation at break (Table 3), and penetration energy (Table 1) were not persuasive because the data in Tables 1-3 is not commensurate in scope with the claims because the inventive examples in Tables 1-3 each contained 3 layers, wherein the claims only require two layers to be present. Furthermore, each example comprises polycarbonate in the substrate layer. Applicant argues the Table 2 (second to last line), table 4 and table 5 each contain an example of a 2-layer laminate. With regards to the examples in tables 4 and 5, said laminates do not support applicant's argument with respect to unexpected results since said tables do not contain data with regards to the purported "unexpected" results. The examiner maintains the position the example of table 2 is not commensurate in scope with the claim because said example comprises polycarbonate. Furthermore, the examiner maintains the position the tables also do not contain examples across the entirety of the claimed range with respect to components A-D. Thus, Applicant's arguments are not persuasive.

Applicant has also filed an 1.132 declaration by Achim Grefenstein (filed October 14, 2003) wherein it is argued that a top layer of styrene-acrylonitrile resin has a higher gloss and higher scratch resistance than a top layer of PMMA. Said declaration has been fully considered but it is not clear how said showing demonstrates unexpected results what would patentably distinguish the claimed product from the product rendered by the prior art. SAN is known in the art to be highly scratch resistant. Furthermore, gloss is going to vary depending upon the method utilized to make said composite.

Since the claims are not limited with regards to how the composite is made, said showing is not commensurate in scope with the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer
Patent Examiner-Art Unit 1773